

## REMARKS

The Examiner objected to claim 3 under 37 C.F.R. § 1.75(c) for failing to further limit the subject matter of a previous claim, asserting that the antioxidant capability of a composition does not further limit the composition of claim 1. Applicant has amended claim 3 to recite a composition including the phosphonated poly(4-phenoxyphenyl-1,4-phenylene) of claim 1, and at least one organic material. Support for this amendment can be found at paragraph [0019] of the specification. Amended claim 3 further limits claim 1, and the objection is obviated.

Applicant also has amended claim 1 to correct minor informalities.

The Examiner rejected claims 1-3 under 35 U.S.C. § 102(a) over Yanagimachi. Applicant traverses this rejection. Yanagimachi is not prior art to the present application. This reference was published in 2003. Applicant is filing with this Amendment a certified English translation of the Japanese priority document JP 2002-346180, dated November 28, 2002. Having perfected its priority date, the present application has priority over Yanagimachi, and the § 102(a) rejection is unsupportable.

Applicant respectfully traverses the 35 U.S.C. § 103(a) rejection of claims 1-10 over WO 93/18077 in view of DE 102 01 866, JP 2000-011755; JP 2000-011756; or Suzuki (U.S. Patent 6,606,856). DE 102 01 866 discloses a main chain of a polymer having a sulfonic acid group, shown in expression (2). This sulfonic acid group cannot be replaced by a phosphonic acid group. Moreover, neither WO 93/18077, JP 2000-011755, JP 2000-011756, nor Suzuki disclose poly(4-phenoxybenzoyl-1,4-phenylene) as recited in the claims. Combining these references, therefore, even should such a combination be made, which Applicant does not concede a person of ordinary skill in the art would do, does not teach all of the features of the claimed invention.

The Examiner contends incorrectly that WO 93/18077 teaches poly(4-phenoxybenzoyl-1,4-phenylene); that DE 102 01 886 teaches poly(4-phenoxybenzoyl-1,4-phenylene) with a sulfonic acid in para position of the phenyl ring and its use as a membrane material in fuel cells; and that JP-2000 011755, JP-2000 011756, and Suzuki teach that it is possible to phosphonate a “high molecular compound having a hydrocarbon part. The Examiner next concludes that, based on the cited references, “it is thus obvious for the average skilled person, which in this case is a chemist specialized in the field of polymers, to phosphonate the poly(4-phenoxybenzoyl-1,4-phenylene) . . . instead of sulfonating and providing the same for an application in fuel cell membranes.”

Applicant respectfully traverses this position. The Examiner has not established a prima facie case of obviousness. In order to demonstrate a prima facie case of obviousness, M.P.E.P. § 2143 requires the Examiner to show at least that the cited references teach or suggest all of the claim limitations, that there is a suggestion or motivation, either in the cited references or in the knowledge generally available to one of ordinary skill in the art, to modify or combine references, and that there is a reasonable expectation of success.

The Examiner has not shown obviousness in this case at least because even if the references contained the cited technology, which they do not, the Examiner still has not shown any teaching within the cited references to motivate modification and/or combination. An obviousness rejection based on a combination of references requires the references to suggest the desirability of the combination. The Examiner is using impermissible hindsight to construct this rejection, and has presented no particular

findings as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected the components of the claimed invention for combination in the manner claimed.

Further, there is no reasonable expectation of success for the proposed combination/modification. Since neither JP 2000-011755, JP 2000-011756, nor Suzuki disclose a poly (4-phenoxybenzoyl-1,4-phenylene), a person of ordinary skill in the art would not have a reasonable belief that such a specific, complex compound could be successfully phosphonated.

Moreover, with respect to claims 2 and 5-8, the Examiner has not shown that every element of the claimed invention is taught by the cited references. The Examiner has not even attempted to show that the cited references teach the synthesis of the phosphonated poly(4-phenoxybenzoyl-1,4-phenylene) as recited in claim 2, nor the claimed amounts of the phosphonated poly(4-phenoxybenzoyl-1,4-phenylene) relative to the polymer electrolyte composite recited in claims 5-8.


In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and the timely allowance of the claims 1-10.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: August 31, 2006

By:   
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**Attachments:**      **Certified English translation of JP 2002-346180.**